

**STATE FOREST LAND
ENVIRONMENTAL CHECKLIST**

Purpose of Checklist:

The State Environmental Policy Act (SEPA), chapter 43.21C RCW, requires all governmental agencies to consider the environmental impacts of a proposal before making decisions. An environmental impact statement (EIS) must be prepared for all proposals with probable significant adverse impacts on the quality of the environment. The purpose of this checklist is to provide information to help you and the agency identify impacts from your proposal (and to reduce or avoid impacts from the proposal, if it can be done) and to help the agency decide whether an EIS is required.

Instructions for Applicants:

This environmental checklist asks you to describe some basic information about your proposal. Governmental agencies use this checklist to determine whether the environmental impacts of your proposal are significant, requiring preparation of an EIS. Answer the questions briefly, with the most precise information known, or give the best description you can. Highlighted questions are supplemental to the standard SEPA checklist. These questions look at the proposed project in relationship to the surrounding landscape. Adjacency and landscape/watershed-administrative-unit (WAU) maps for this proposal are available on the DNR internet website at <http://www.dnr.wa.gov> under "SEPA Center." These maps may also be reviewed at the DNR regional office responsible for the proposal. This checklist is to be used for SEPA evaluation of state forest land activities.

You must answer each question accurately and carefully, to the best of your knowledge. In most cases, you should be able to answer the questions from your own observations or project plans without the need to hire experts. If you really do not know the answer, or if a question does not apply to your proposal, write "do not know" or "does not apply." Complete answers to the questions now may avoid unnecessary delays later. All of the questions are intended to address the complete proposal as described by your response to question A-11. The proposal acres in question A-11 may cover a larger area than the attached forest practice application acres, or the actual timber sale acres.

Some questions ask about governmental regulations, such as zoning, shoreline, and landmark designations. Answer these questions if you can. If you have problems, the governmental agencies can assist you.

The checklist questions apply to all parts of your proposal, even if you plan to do them over a period of time or on different parcels of land. Attach any additional information that will help describe your proposal or its environmental effects. The agency to which you submit this checklist may ask you to explain your answers or provide additional information reasonably related to determining if there may be significant adverse impact.

Use of checklist for nonproject proposals:

Complete this checklist for nonproject proposals, even though questions may be answered "does not apply." IN ADDITION, complete the SUPPLEMENTAL SHEET FOR NON PROJECT ACTIONS (part D).

For nonproject actions, the references in the checklist to the words "project," "applicant," and "property or site" should be read as "proposal," "proposer" and "affected geographic area," respectively.

A. BACKGROUND

1. Name of proposed project, if applicable:

Timber Sale Name: **BUSHWHACKER**

Agreement #: **30-075025**

2. Name of applicant:

Washington State Department of Natural Resources

3. Address and phone number of applicant and contact person:

**Department of Natural Resources
Bud Clark
1405 Rush Road
Chehalis, WA 98532
(360) 748-2383**

4. Date checklist prepared:

April 21, 2003

5. Agency requesting checklist:

Washington State Department of Natural Resources

6. Proposed timing or schedule (including phasing, if applicable):

- a. Auction Date: **2004**
b. Planned contract end date (but may be extended): **2005**
c. Phasing: **Does not apply.**

7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.

Timber Sale

- a. Site preparation: **As needed, in accordance with the Final Forest Resource Plan (July 1992) and the Final Habitat Conservation Plan (September 1997).**
b. Regeneration Method: **Hand planting or natural regeneration.**
c. Vegetation Management: **As needed, in accordance with the Final Forest Resource Plan (July 1992) and the Final Habitat Conservation Plan (September 1997).**

d. Thinning: As needed, in accordance with the Final Forest Resource Plan (July 1992) and the Final Habitat Conservation Plan (September 1997).

Roads: Roads remaining at the termination of the sale will be used for future forest management activities. Road maintenance and periodic ditch and culvert cleanout will occur as necessary.

Rock Pits and/or Sale: The Department may expand the existing Powerline Pit in conjunction with this sale. The rock pit may be used for future road construction, reconstruction, and maintenance activities associated with forest management.

Other: Landing slash piles may be burned following the completion of logging. Firewood salvage may occur after logging.

8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.

☐ 303 (d) – listed water body in WAU: ☐ temp ☐ sediment ☐ completed TMDL (total maximum daily load):

☐ Landscape plan:

☐ Watershed analysis:

☐ Interdisciplinary team (ID Team) report:

☒ Road design plan: Available at Central Region office.

☒ Wildlife report: Available at Central Region office.

☐ Geotechnical report: Attached.

☐ Other specialist report(s):

☐ Memorandum of understanding (sportsmen’s groups, neighborhood associations, tribes, etc.):

☐ Rock pit plan:

☒ Other: Final Forest Resources Plan (July 1992); Final Habitat Conservation Plan (September 1997); State Soil Survey; Marbled Murrelet Habitat Reclassification Map from DNR RPAM Division; ESA Listed Salmonid Map from Forest Practices; Forestry Handbook (August 1999) with updates; WAU maps; DNR’s Planning and Tracking database; and Forest Practices rules. Available at Central Region office.

9. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain.

None known.

10. List any government approvals or permits that will be needed for your proposal, if known.

☒ HPA: Log Number ST-D9199-04 ☒ Burning permit (if landing piles are burned) ☐ Shoreline permit ☒ Incidental take permit: 1168 and PRT-812521. ☒ FPA # ☐ Other:

11. Give brief, complete description of our proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page. (Lead agencies may modify this form to include specific information on project description.)

a. Complete proposal description:

The Bushwhacker Timber Sale is a two-unit even-age harvest (with leave trees). The total gross acreage of the proposal is 75 acres, which consists of 69 harvest acres in Unit #1, four harvest acres in Unit #2, and 1.6 acres of an existing road within Unit #1. There are approximately four acres of leave tree areas in Unit #1. There are no streams in or immediately adjacent to this proposal. Both units are located in Section 11, Township 16 North, Range 01 East, W.M. Approximately 7% of the original stand will remain as leave trees. In order to reduce the potential of leave trees blowing down or falling over from Unit #2 onto adjacent residences and the location of proposed landing locations, leave trees will not be left in Unit #2. The number of leave trees required to be left in Unit #2 will be left in Unit #1.

There are 1,513 feet of required road construction and 5,333 feet of pre-haul maintenance.

b. Timber stand description pre-harvest (include major timber species and origin date), type of harvest, overall unit objectives.

Pre-harvest description: Both units are even-aged stands comprised almost entirely of Douglas-fir with small amounts of western hemlock, red alder, bigleaf maple, and western red cedar. Both stands are approximately 60-years-old. The understory consists of primarily sword fern, salal, and Oregon grape.

Type of harvest: Regeneration harvest with leave trees. Both units are relatively flat and will be logged using ground-based harvesting techniques. The units will be replanted with Douglas-fir or regenerate naturally. Red alder and western hemlock are expected to naturally seed in.

Overall unit objectives: Harvest objectives are to provide revenue for trust beneficiaries though sustainable forestry while meeting the obligations of Forest Practices rules, DNR’s HCP, and Forest Resource Plan. In addition to producing revenue for the trust now and in the future, the following objectives will be implemented with this proposal:

- Provide wildlife habitat for a variety of species, including cavity nesters, by leaving older trees and snags when available.
- Retain parts of the original forest for future generations (old residual trees, snags, and a mix of second growth timber).

c. Road activity summary. See also attached forest practice application (FPA) for maps and more details.

Type of Activity	How Many	Length (feet) (Estimated)	Acres (Estimated)	Fish Barrier Removals (#)
Construction		1,513	0.7	0
Reconstruction		0		0
Maintenance		5,333		0
Abandonment		0	0	0
Bridge Install/Replace	0			0
Culvert Install/Replace (fish)	0			0

Culvert Install/Replace (no fish)	2			
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12. Location of proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist. (See attached timber sale map. See also color landscape/WAU map on the DNR website <http://www.dnr.wa.gov> under “SEPA Center.”)

a. Legal description:

Section 11, Township 16 North, Range 1 East, W.M.
Section 14, Township 16 North, Range 1 East, W.M.

b. Distance and direction from nearest town (include road names):

The timber sale area is located approximately three road miles east of Rainier, WA. From I-5 take exit 88 onto Old Highway 99 and travel approximately 8.7 miles east to Tenino. Once in Tenino head east on SR-507 approximately 7.9 miles to Rainier, WA. In Rainier turn right onto Centre Street. Travel 2.1 miles and turn left onto the G-100 Road. The proposal is located 0.5 miles down the G-100 road behind the yellow gate.

c. Identify the watershed administrative unit (WAU), the WAU Sub-basin(s), and acres. (See also landscape/WAU map on DNR website <http://www.dnr.wa.gov> under “ SEPA Center.”)

WAU Name	WAU Acres	Proposal Acres
YELM	33,184	75

Sub-basin: Nisqually Lowland
Sub-basin Acres: Unknown

13. Discuss any known future activities not associated with this proposal that may result in a cumulative change in the environment when combined with the past and current proposal(s). (See digital ortho-photos for WAU and adjacency maps on DNR website <http://www.dnr.wa.gov> under “SEPA Center” for a broader landscape perspective.)

This proposal is located within the Yelm WAU. The topography within the WAU consists of gently rolling hills and flat ground. This region is a mixture of agricultural fields, home sites, and relatively small private forest blocks. In recent years, a significant amount of the forested land in the WAU has been converted to home sites. The proposal is located in a 160-acre block of DNR land. New homes have been built immediately adjacent to the southern portion of the sale since the orthophoto was taken and depicted on the Harvest Unit Adjacency Map. There are no streams within 200 feet of this proposal.

The following table is an estimated summary of past and future activity on DNR-managed land and privately managed land in the WAU (information is based off of Forest Practices applications that have been approved in the last seven years compiled by the Department’s GIS database). Proposed future harvests are anticipated on DNR managed land and have not been approved by Forest Practices. No attempt was made to predict future timber harvest on private ownerships within the WAU. Approximately 20% of the land managed by the DNR in the Yelm WAU is covered with vegetation greater than 25-years-old. Less than 2% of the acreage within the Yelm WAU are managed by the DNR.

	WAU ACRES	ACRES OF EVEN-AGED HARVEST WITHIN THE LAST SEVEN YEARS	ACRES OF UNEVEN-AGED HARVEST WITHIN THE LAST SEVEN YEARS	PROPOSED ACRES OF EVEN-AGED HARVEST IN THE FUTURE	PROPOSED ACRES OF UNEVEN-AGED HARVEST IN THE FUTURE
YELM WAU					
DNR MANAGED LAND	539	100	2	~50-100	0
PRIVATE OWNERSHIP	32,645	1,072	530	UNKNOWN	UNKNOWN
TOTAL	33,184	1,172	532	~50-100	0

During the last 10 years the DNR has conducted approximately 300 acres of regeneration harvests within the Yelm WAU. This proposal is immediately adjacent to an 82-acre regeneration harvest that was completed in 1997 (See area marked “unknown” on the Harvest Unit Adjacency Map). These stands have been selected because they meet the financial requirements (timber type, stand age, trust, etc.) and the ecological requirements (HCP and forest practice requirements, green-up policies, etc.) of the Department. Additional harvests are expected in adjacent WAUs on DNR managed land and privately owned land. The 33-acre Paradise Timber Sale is located approximately one mile southwest of this proposal in the Tumwater WAU. This timber sale will be harvested within the next two years. After this proposal has been harvested, all 160 acres in this DNR managed block will consist of plantations or retention tree clumps. Adjacent private lands are comprised of mature stands of timber and home sites.

The DNR has an HCP agreement with the federal government concerning threatened and endangered species and their habitats, which requires the Department to manage landscapes in a conservative manner. This agreement substantially helps the Department to mitigate for harmful cumulative effects related to its management activities. The HCP is designed to protect and promote fish and wildlife species and their habitats over a broad regional area. The applicable HCP strategies incorporated into this proposal are as follows:

- Analyzing, designing, and constructing a road system that minimizes effects on the environment.
- Retaining an average of eight retention trees per acre clumped throughout the sale area.

The strategy of retaining an average of eight leave trees per acre in the regeneration harvest areas should provide elements of older forest habitat characteristics within the third growth stand for recruitment of future snags, coarse woody debris, multi-layered stands, and large diameter trees. By managing to develop older forest characteristics, habitats will be provided for wildlife species dependent on older forest habitat. Road system analysis and design required under the Forest Practices RMAP

process will improve roads and minimize road impacts on the environment. The road system planning analysis and upgrades for the roads related to this proposal have not been completed.

In addition to mitigation efforts incorporated into this proposal under the HCP and Forest Practices RMAP process, DNR will include contract language in this proposal to meet legal requirements of Forest Practices and Department of Ecology. This language addresses timing of operations, restrictions on impacts to soils (compaction/ rutting), and requirements for sediment control devices and techniques.

A total of 55 landowners in the vicinity of the sale area were contacted via letter describing the proposed harvest. In addition, during field reconnaissance the field forester talked to five landowners that owned parcels immediately adjacent to the sale area. No phone calls, written comments, or responses were received from landowners. However, in order to reduce potential impacts to adjacent landowners, several mitigation measures will be incorporated into this proposal and included in the timber sale contract.

- The Purchaser will be required to provide a written Extreme Hazard Abatement plan that meets the requirements of WAC 332-24 prior to the beginning of logging operations. The plan must be acceptable to the Contract Administrator.
- The Purchaser will be required to construct a fire trail a minimum of four feet wide along the south and east boundaries of Unit #1 and Unit #2 as directed by the Contract Administrator.
- The Purchaser will be required to abate dust on portions of the G-100 Road during the hauling of forest products.
- The Purchaser will be required to repair all fence damage resulting from harvest operations for this sale to equal or better condition than existed at the time of sale.
- In order to reduce noise and transportation that may impact adjacent landowners, harvest operations will not be permitted on weekends, State recognized holidays, or from 7 p.m. to 7 a.m. on weekdays.
- In order to reduce the potential of leave trees blowing down or falling over from Unit #2 onto adjacent residences and the location of proposed landing locations, leave trees will not be left in Unit #2. The number of leave trees required to be left in Unit #2 will be left in Unit #1.

B. ENVIRONMENTAL ELEMENTS

1. Earth

a. General description of the site (check one):

☐ Flat, ☒ Rolling, ☐ Hilly, ☐ Steep Slopes, ☐ Mountainous, ☐ Other:

1) General description of the WAU or sub-basin(s) (landforms, climate, elevations, and forest vegetation zone).

The Yelm WAU generally consists of flat to rolling topography between sea level and 450 feet elevation. There are some slopes more than 25% but most vary between 0% and 25%. The WAU averages 45 inches of precipitation per year. The WAU is heavily populated. The primary timber type is Douglas fir. The WAU lies within the western Douglas-fir forest vegetation zone.

2) Identify any difference between the proposal location and the general description of the WAU or sub-basin(s).

This location of this proposal is consistent with the general description of the WAU.

b. What is the steepest slope on the site (approximate percent slope)?

Approximately 35%.

c. What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any prime farmland. Note: The following table is created from state soil survey data. It is a roll-up of general soils information for the soils found in the entire sale area. It is only one of several site assessment tools used in conjunction with actual site inspections for slope stability concerns or erosion potential. It can help indicate potential for shallow, rapid soil movement, but often does not represent deeper soil sub-strata. The actual soils conditions in the sale area may vary considerably based on land-form shapes, presence of erosive situations, and other factors. The state soil survey is a compilation of various surveys with different standards.

State Soil Survey #	Soil Texture or Soil Complex Name	% Slope	Acres	Mass Wasting Potential	Erosion Potential
0064	GRAVELLY SANDY LOAM	15-30	70	INSIGNIFICANT	LOW
1994	GRAVELLY SANDY LOAM	3-15	3	INSIGNIFICANT	LOW

d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe.

1) Surface indications:

None.

2) Is there evidence of natural slope failures in the sub-basin(s)?

☐ No ☒ Yes, type of failures (shallow vs. deep-seated) and failure site characteristics:

There is evidence of natural slope failures in the Yelm WAU sub-basins. Slope failures are found primarily along streams in inner gorges and associated with soil creep and other natural geomorphic processes. Evidence of natural slope failures may be seen along the Deschutttes River, located approximately 2.5 miles southwest of the proposal, and the Nisqually River, approximately eight miles east of the proposal.

3) Are there slope failures in the sub-basin(s) associated with timber harvest activities or roads?

☒ No ☐ Yes, type of failures (shallow vs. deep-seated) and failure site characteristics:

Associated management activity:

None known.

- 4) Is the proposed site similar to sites where slope failures have occurred previously in the sub-basin(s)?
☒No ☐Yes, describe similarities between the conditions and activities on these sites:
- 5) Describe any slope stability protection measures (including sale boundary location, road, and harvest system decisions) incorporated into this proposal.

This proposal is on rolling terrain with no streams in or immediately adjacent to the sale area; therefore, slope stability protection measures will not be implemented.

- e. Describe the purpose, type, and approximate quantities of any filling or grading proposed. Indicate source of fill.
Approx. acreage new roads: **0.7** Approx. acreage new landings: **1.0** Approx. acreage rock pit fills: **None** Fill source: **N/A**
- f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe.

Yes, minimal erosion could occur as a result of this proposal.
- g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)? Approximate percent of proposal in permanent road running surface (includes gravel roads):

None. Approximately 1% of the site will be covered with gravel roads.
- h. Propose measures to reduce or control erosion, or other impacts to the earth, if any:
(Include protection measures for minimizing compaction or rutting.)

Road construction and tracked equipment use will not be permitted between September 30 and May 1 unless authorized by the Contract Administrator. Hauling of wood products shall be suspended if rutting exceeds six inches on roads. Cut and fill slopes will be re-vegetated. Grass seed planted on exposed soil will help prevent erosion. Sediment traps will be placed along roads where needed. Surface runoff will be collected in well-defined ditches that are clear of debris and fully functional. Runoff will flow into culverts or ditch outs and then discharged onto the forest floor for filtration. Shovel logging shall be in accordance with Shovel Logging Specifications on file at the region office. Hauling will not be permitted from September 30 to May 1 on the G-100 and G-130 Roads unless authorized by the Contract Administrator.

2. Air

- a. What types of emissions to the air would result from the proposal (i.e., dust from truck traffic, rock mining, crushing or hauling, automobile, odors, industrial wood smoke) during construction and when the project is completed? If any, generally describe and give approximate quantities if known.

Minimal amounts of engine exhaust from logging equipment, log trucks, and automobiles will be emitted as a result of this proposal. If landing slash is burned, smoke will be emitted into the air.
- b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe.

No.
- c. Proposed measures to reduce or control emissions or other impacts to air, if any:

Landing slash may be burned in accordance with the State’s Smoke Management Program. A burn permit will be obtained before burning occurs.

3. Water

- a. Surface:

1) Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into. (See attached timber sale map and forest practice base maps.)

a) Downstream water bodies:

There are no streams within or immediately adjacent to this proposal. The nearest stream is a type 5 stream that begins several hundred feet west of the sale boundary. There are several small wetlands in the area but none are located within a quarter mile of this proposal.

b) Complete the following riparian & wetland management zone table:

Wetland, Stream, Lake, Pond, or Saltwater Name (if any)	Water Type	Number (how many?)	Avg RMZ/WMZ Width in Feet (per side for streams)

c) List RMZ/WMZ protection measures including silvicultural prescriptions, road-related RMZ/WMZ protection measures, and wind buffers.

Does not apply.

2) Will the project require any work over, in, or adjacent to (within 200 feet) to the described waters? If yes, please describe and attach available plans.
☒No ☐Yes (See RMZ/WMZ table above and attached timber sale map.)
Description (include culverts):

- 3) Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material.
- None.**
- 4) Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known. (Include diversions for fish-passage culvert installation.)
☒No ☐Yes, description:
- 5) Does the proposal lie within a 100-year floodplain? If so, note location on the site plan.
☒No ☐Yes, describe location:
- 6) Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.
☒No ☐Yes, type and volume:
- 7) Does the sub-basin contain soils or terrain susceptible to surface erosion and/or mass wasting? What is the potential for eroded material to enter surface water?
- Less than 1% of the soils in the Yelm WAU are highly susceptible to soil erosion. A low proportion of eroded material could enter surface water within the WAU. There is no potential for eroded material to enter surface water as a result of this proposal.**
- 8) Is there evidence of changes to the channels in the WAU and sub-basin(s) due to surface erosion or mass wasting (accelerated aggradations, erosion, decrease in large organic debris (LOD), change in channel dimensions)?
☒No ☐Yes, describe changes and possible causes:
- None known.**
- 9) Could this proposal affect water quality based on the answers to the questions 1-8 above?
☒No ☐Yes, explain:
- 10) What are the approximate road miles per square mile in the WAU and sub-basin(s)?
- There are approximately three road miles per square mile in the WAU. The approximate road miles per square mile in the sub-basin are unknown.**
- Are you aware of areas where forest roads or road ditches intercept sub-surface flow and deliver surface water to streams, rather than back to the forest floor?
☒No ☐Yes, describe:
- 11) Is the proposal within a significant rain-on-snow (ROS) zone? If not, **STOP HERE** and go to question B-3-a-13 below. Use the WAU or sub-basin(s) for the ROS percentage questions below.
☒No ☐Yes, approximate percent of WAU in significant ROS zone.
Approximate percent of sub-basin(s):
- 12) If the proposal is within the significant ROS zone, what is the approximate percentage of the WAU or sub-basin(s) within the significant ROS zone (all ownerships) that is (are) rated as hydrologically mature?
- 13) Is there evidence of changes to channels associated with peak flows in the WAU or sub-basin(s)?
☐No ☒Yes, describe observations:
- None known.**
- 14) Based on your answers to questions B-3-a-10 through B-3-a-13 above, describe whether and how this proposal, in combination with other past, current, or reasonably foreseeable proposals in the WAU and sub-basin(s), may contribute to a peak flow impact.
- This proposal should not change the timing, duration, or amount of water in a peak flow event.**
- 15) Is there water resource (public, domestic, agricultural, hatchery, etc.), or area of slope instability, downstream or downslope of the proposed activity that could be affected by changes in surface water amounts, quality, or movements as a result of this proposal?
☒No ☐Yes, possible impacts:
- 16) Based on your answers to questions B-3-a-10 through B-3-a-15 above, note any protection measures addressing possible peak flow/flooding impacts.

The following measures will address possible peak flow/flooding impacts:

- **Increasing in the number of culverts to discharge water to the forest floor.**
- **Limiting future harvest unit sizes to less than 100 acres and following Forest Resource Plan green-up policies. The size of the harvest area is 73 acres.**

b. Ground Water:

- 1) Will ground water be withdrawn, or will water be discharged to ground water? Give general description, purpose, and approximate quantities if known

Ground water will not be withdrawn nor will water be discharged into ground water.

- 2) Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: Domestic sewage; industrial, containing the following chemicals; agricultural; etc.). Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve.

Insignificant amounts of oil and other lubricants could be inadvertently discharged as a result of heavy equipment use. No lubricants will be disposed of on site. See B.7.a.2.

- 3) Is there a water resource use (public, domestic, agricultural, hatchery, etc.), or area of slope instability, downstream or down slope of the proposed activity that could be affected by changes in groundwater amounts, timing, or movements as a result this proposal?
☒No ☐Yes, describe:

a) Note protection measures, if any.

See B.1.h.

c. Water Runoff (including storm water):

- 1) Describe the source of runoff (including storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe.

Surface runoff from the roads will be collected in ditches and discharged through culverts and ditch-outs to the forest floor for natural filtration. Sediment ponds and/or silt fences will be used to remove silt from ditch water, where necessary.

- 2) Could waste materials enter ground or surface waters? If so, generally describe.

No.

a) Note protection measures, if any.

Not applicable.

d. Proposed measures to reduce or control surface, ground, and runoff water impacts, if any:

(See surface water, ground water, and water runoff sections above, questions B-3-a-1-c, B-3-a-16, B-3-b-3-a, and B-3-c-2-a.)

See B.1.h.

4. Plants

a. Check or circle types of vegetation found on the site:

- ☒ deciduous tree: ☒alder, ☒maple, ☐aspen, ☐cottonwood, ☐western larch, ☐birch, ☐other: cherry
☒ evergreen tree: ☒Douglas-fir, ☐grand fir, ☐Pacific silver fir, ☐ponderosa pine, ☐lodgepole pine, ☒western hemlock, ☐mountain hemlock, ☐Englemann spruce, ☐Sitka spruce, ☒red cedar, ☐yellow cedar, ☐other:
☒ shrubs: ☐huckleberry, ☐salmonberry, ☒salal, ☒Oregon grape
☐ grass
☐ pasture
☐ crop or grain
☐ wet soil plants: ☐cattail, ☐buttercup, ☐bull rush, ☐skunk cabbage, ☐devil's club, ☐other:
☐ water plants: ☐water lily, ☐eelgrass, ☐milfoil, ☐other:
☒ other types of vegetation: sword fern
☐ plant communities of concern:

b. What kind and amount of vegetation will be removed or altered?

(See answers to questions A-11-a, A-11-b, B-3-a-1-b and B-3-a-1-c. The following sub-questions merely supplement those answers.)

Approximately 93% of the overstory vegetation will be removed for harvest. The understory vegetation will remain on site following harvest; however, it may be disturbed during harvest.

- 1) Describe the species, age, and structural diversity of the timber types immediately adjacent to the removal area. (See landscape/WAU and adjacency maps on the DNR website at: <http://www.dnr.wa.gov> under "SEPA Center.")

The northern and western boundary of the sale area abuts a five-year-old Douglas-fir plantation. The southern boundary of the sale area abuts land that has been converted to pasture and a number of home sites. The western boundary of the sale area abuts timber approximately 60-years-old.

- 2) Retention tree plan:

Approximately 93% of the overstory will be removed. The rest will remain as leave trees areas scattered about the site. An average of eight leave trees will be left within the sale area after harvest. Leave trees are bounded by Leave Tree Area tags in Unit #1. Because Unit #2 is in close proximity to home sites, there will be no leave trees designated within the harvest unit. The number of leave trees required to be left in Unit #2 have been bounded by Leave Tree Area tags and are located in Unit #1. A total of 590 trees will be left within Unit #1.

- c. List threatened or endangered plant species known to be on or near the site.

TSU Number	FMU ID	Common Name	Federal Listing Status	WA State Listing Status
None Found in Database Search				

- d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any:

The unit will be replanted with Douglas-fir or regenerate naturally. Red alder and western hemlock are expected to naturally seed in. A total of 590 leave trees will be left within the sale area.

5. Animal

- a. Circle or check any birds animals or unique habitats which have been observed on or near the site or are known to be on or near the site:

birds: ☐hawk, ☐heron, ☐eagle, ☒songbirds, ☐pigeon, ☒other: grouse
mammals: ☒deer, ☒bear, ☒elk, ☐beaver, ☐other:
fish: ☐bass, ☐salmon, ☐trout, ☐herring, ☐shellfish, ☐other:
unique habitats: ☐talus slopes, ☐caves, ☐cliffs, ☐oak woodlands, ☐balds, ☐mineral springs

- b. List any threatened or endangered species known to be on or near the site (include federal- and state-listed species).

TSU Number	FMU ID	Common Name	Federal Listing Status	WA State Listing Status
None Found in Database Search				

- c. Is the site part of a migration route? If so, explain.

☒Pacific flyway ☐Other migration route: Explain if any boxes checked:

This site is part of the Pacific flyway but is not used extensively for nesting or feeding by waterfowl.

- d. Proposed measures to preserve or enhance wildlife, if any:

Clumped leave trees will provide habitat for wildlife, such as as perches and nest sites. These leave trees will become future snags and legacy trees for future generations.

- 1) Note existing or proposed protection measures, if any, for the complete proposal described in question A-11.

Species/Habitat: **upland species**
Protection Measures: **DNR’s HCP Multispecies Conservation Strategy for Unlisted Species and Minimization and Mitigation for other Federally Listed species strategies also provide management direction for habitat protection of many upland wildlife species as well as riparian dependent species. These strategies require the DNR to manage forest land for uncommon habitats (talus, caves, cliffs, oak woodlands, large snags, and structurally unique trees), which are habitats conducive to upland wildlife, spotted owls, and marbled murrelets.**

6. Energy and Natural Resources

- a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project’s energy needs? Describe whether it will be used for heating, manufacturing, etc.

Does not apply.

- b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.

Does not apply.

- c. What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any:

Does not apply.

7. Environmental Health

- a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste, that could occur as a result of this proposal? If so, describe.

Minimal hazard incidental to operating heavy machinery such as the risk of fire or small amounts of oil and other lubricants accidentally discharged as a result of heavy equipment use.

- 1) Describe special emergency services that might be required.

There are no special emergency services required at this time. Pump trucks and/or pump trailers will be required on site during fire season. In the event of a lubricant spill, the Purchaser will contact DNR and the Department of Ecology.

- 2) Proposed measures to reduce or control environmental health hazards, if any:

No oil or lubricants will be disposed of on site. Fire tools and equipment will be kept on site during fire season. The cessation of operations may occur during periods when the risk of fire is unacceptably high. In the event of a lubricant spill, the Purchaser will contact DNR and the Department of Ecology.

b. Noise

- 1) What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)?

Does not apply.

- 2) What types and levels of noise would be created by or associated with the project on a short-term or long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from this site.

Minimal noise levels associated with logging operations and truck traffic. Logging and hauling will be permitted from 7 a.m. to 7 p.m. on weekdays only. There will be no long-term impacts.

- 3) Proposed measures to reduce or control noise impacts, if any:

No operations shall occur on any weekends, State recognized holidays, or from 7 p.m. to 7 a.m. on weekdays in order to reduce noise resulting from this proposal that may be heard by adjacent landowners.

8. Land and Shoreline Use

- a. What is the current use of the site and adjacent properties? (Site includes the complete proposal, e.g. rock pits and access roads.)

Timber production and forest management activities.

- b. Has the site been used for agriculture? If so, describe.

No.

- c. Describe any structures on the site.

None.

- d. Will any structures be demolished? If so, what?

No.

- e. What is the current zoning classification of the site?

Forestry.

- f. What is the current comprehensive plan designation of the site?

Long-term forestry.

- g. If applicable, what is the current shoreline master program designation of the site?

Does not apply.

- h. Has any part of the site been classified as an “environmentally sensitive” area? If so, specify.

Does not apply.

- i. Approximately how many people would reside or work in the completed project?

Does not apply.

- j. Approximately how many people would the completed project displace?

Does not apply.

- k. Proposed measures to avoid or reduce displacement impacts, if any:

Does not apply.

- l. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any:

This proposal has been laid out in accordance with the current DNR Forest Resource Plan (July 1992), Final HCP (September 1997), current Forest Practices rules as they apply in conjunction with current land use classifications.

9. Housing

- a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.

Does not apply.

- b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.
- Does not apply.**
- c. Proposed measures to reduce or control housing impacts, if any:
- Does not apply.**

10. Aesthetics

- a. What is the tallest height of any proposed structure(s), not including antennas; what is the principle exterior building material(s) proposed?
- Does not apply.**
- b. What views in the immediate vicinity would be altered or obstructed?

This proposal will alter the views from a small number of private residences but will not otherwise affect views in the area.

- 1) Is this proposal visible from a residential area, town, city, developed recreation site, or a scenic vista?
☐No ☒Yes, viewing location:

This proposal will be visible from approximately seven private residences. Five of these sites are immediately adjacent to this proposal.

- 2) Is this proposal visible from a major transportation or designated scenic corridor (county road, state or interstate highway, US route, river, or Columbia Gorge SMA)?
☒No ☐Yes, scenic corridor name:

- 3) How will this proposal affect any views described in 1) or 2) above?

The view from these residences will be changed significantly as a result of timber harvest. The view will change from a stand of mature timber to a view of a plantation and clumped leave trees. Adjacent residences will experience the greatest impact once the stand is harvested.

- c. Proposed measures to reduce or control aesthetic impacts, if any:
- A total of 590 leave trees left clumped within Unit #1 to reduce the visual impacts of the harvest. The site will be replanted after harvest or regenerate naturally.**

11. Light and Glare

- a. What type of light or glare will the proposal produce? What time of day would it mainly occur?
- Does not apply.**
- b. Could light or glare from the finished project be a safety hazard or interfere with views?
- Does not apply.**
- c. What existing off-site sources of light or glare may affect your proposal?
- Does not apply.**
- d. Proposed measures to reduce or control light and glare impacts, if any:
- Does not apply.**

12. Recreation

- a. What designated and informal recreational opportunities are in the immediate vicinity?
- Dispersed informal recreation such as hunting, berry picking, sightseeing, etc.**
- b. Would the proposed project displace any existing recreational uses? If so, describe:
- Recreation will be temporarily displaced during logging operations on the timber harvest area.**
- c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any:
- None.**

13. Historic and Cultural Preservation

- a. Are there any places or objects listed on, or proposed for national, state, or local preservation registers known to be on or next to the site? If so, generally describe.
- None have been identified.**

- b. Generally describe any landmarks or evidence of historic, archaeological, scientific, or cultural importance known to be on or next to the site.
- None have been identified.**
- c. Proposed measures to reduce or control impacts, if any:
(Include all meetings or consultations with tribes, archaeologists, anthropologists or other authorities.)
- None.**

14. Transportation

- a. Identify public streets and highways serving the site, and describe proposed access to the existing street system. Show on site plans, if any.

This proposal will utilize forest roads, county roads, state highways, and interstate highways.

- 1) Is it likely that this proposal will contribute to an existing safety, noise, dust, maintenance, or other transportation impact problem(s)?

The transport of logs and logging equipment will increase on forest roads that access the sale area. Dust may temporarily increase on roads that access the sale area. The G-100 Road passes by four houses; however, the Purchaser will be required to abate dust on portions of the G-100 Road throughout the duration of harvest activities. Noise from chainsaws and heavy machinery may be heard by five residential areas immediately adjacent to the sale area.

- b. Is site currently served by public transit? If not, what is the approximate distance to the nearest transit stop?
- No.**
- c. How many parking spaces would the completed project have? How many would the project eliminate?
- Does not apply.**
- d. Will the proposal require any new roads or streets, or improvements to existing roads or streets, not including driveways? If so, generally describe (indicate whether public or private).

See A.11.

- 1) How does this proposal impact the overall transportation system/circulation in the surrounding area, if at all?

This proposal will increase the traffic by up to 20 vehicle and log truck round trips per day but will not affect the overall transportation system in the area.

- e. Will the project use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.
- No.**
- f. How many vehicular trips per day would be generated by the completed project? If known, indicate when peak volumes would occur.
- Up to 20 round trips per day could occur during road construction and logging operations.**
- g. Proposed measures to reduce or control transportation impacts, if any:
- In order to reduce noise that may be heard by adjacent landowners and limit impacts from transportation, operations will not be permitted on weekends, State recognized holidays, or from 7 p.m. to 7 a.m. on weekdays. In order to reduce dust that may result from the hauling of forest products, the Purchaser will be required to abate dust on the G-100 Road from the county road-G-100 Road junction to 200 feet north of the gate which accesses the sale area.**

15. Public Services

- a. Would the project result in an increased need for public services (for example: fire protection, police protection, health care, schools, other)? If so, generally describe.

Does not apply.

- b. Proposed measures to reduce or control direct impacts on public services, if any.

Does not apply.

16. Utilities

- a. Circle utilities currently available at the site: electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system, other.

Does not apply.

- b. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed.

Does not apply.

C. SIGNATURE

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

Completed by: <u>Adrian C. Frank</u>	Title: <u>Forester 1</u>	Date: <u>APRIL 21, 2003</u>
Reviewed by: <u>Bud Clark</u>	Title: <u>District Manager</u>	Date: <u>JUNE 12, 2003</u>
Reviewed by: _____	Title: _____	Date: _____